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Mergers by Choice, Not Edict: Reforming Ontario's Electricity Distribution Policy

The Ontario government should not force local electricity distribution companies to merge. Instead, it should abolish taxes that constrain private sector investment.

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The Study In Brief

Provincially appointed panels have recommended that the province of Ontario force local electricity distribution companies (LDCs) to amalgamate into a handful of large, regional operations. However, just as forced consolidations of municipalities have led to few clear savings, so too it is unclear that forced amalgamation of local electricity distributors would lower costs in the sector. Instead of forcing mergers, provincial policy should be neutral towards mergers and acquisitions, permit private sector participation, and allow individual LDCs and municipalities to make their own choices.

Accordingly, the government should reform tax policies that currently impose barriers on private investment, and permit individual distribution companies to pursue commercially sensible mergers and to seek the private investment they need to renew their aging capital stock.

The case for forced amalgamations depends on two premises: first, that there are too many distributors in Ontario; and, second, that the government should encourage or force consolidation. These premises are, however, logically independent from each other: even if there are too many distributors in light of potential scale economies, the case for a government-directed consolidation should be examined on its own merits.

Although many LDCs are smaller than the optimal size, there is no evidence to suggest that a few very large, amalgamated LDCs would be the most economically efficient outcome.

A more fundamental question than scale is that of ownership. Ontario tax policy is neutral toward mergers of publicly owned LDCs, but restricts private sector participation in the sector. As a consequence, tax policy prevents any consolidations led by commercially owned companies. In our view, the province should remove barriers to private sector investment in the distribution sector, which it can achieve by eliminating taxes on sales of LDCs to private companies.

To preserve the provincial tax base if Ontario were to eliminate taxes on the transfer or sale of LDCs to private companies, the federal government should enact changes to the *Income Tax Act*. The federal government should either allow LDCs to remain tax exempt with as much as 49 percent private ownership or, even better, introduce a transfer tax system in which it remits to the province corporate taxes it collects from privatized utilities.

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Change is coming to Ontario's electricity distribution sector. Local electricity distribution sector costs have increased in recent years, drawing the Ontario government's attention to the topic, and multiple provincially appointed panels have argued that local distributors should be amalgamated.

However, just as forced consolidations of municipalities have led to few clear savings, so too it is unclear that forced amalgamation of local electricity distributors would lower costs in the sector. The provincial government, therefore, should not force or encourage consolidation. Instead, it should be neutral toward mergers, as distinct from its current policy stance, which has hampered potential mergers and privately led consolidations. Accordingly, the government should reform tax policies that currently impose barriers on investment, and permit individual distribution companies to pursue commercially sensible mergers and to seek the private investment they need to renew their aging capital stock.

Overview and Preview of Recommendations

The most recent Ontario initiative with respect to local utility consolidation is the December 2012 report of the Ontario Distribution Sector Review Panel (hereafter referred to as the Panel Report),[1] which recommended that 73 local distribution companies (LDCs) be consolidated into 8 to 12 larger regional distributors.[2] It further recommended that this consolidation be pursued on a voluntary basis, but, if it could not be completed within two years, the government should force a consolidation through legislation.[3]

The authors would like to thank Stephanie Wong for her patience and technical support, Ben Dachis for his help with the empirical work and anonymous reviewers for comments.

1 The panel was established in response to the Commission on the Reform of Ontario's Public Services (2012), which recommended that the province:

> [c]onsolidate Ontario's 80 local distribution companies (LDCs) along regional lines to create economies of scale. Reducing the $1.35 billion spent on operations, maintenance and administrative costs for Ontario's LDCs would result in direct savings on the delivery portion of the electricity bill. Flexibility regarding LDC sector reform could be greatly enhanced through a co-operative federal-provincial tax arrangement that returns to the province any federal corporate taxes paid by newly privatized electricity utilities. This would allow the province to remove the 33 per cent transfer tax on such divestitures currently in place that goes towards stranded debt. It would also help compensate for the future loss of the federal portion of PILs when a publicly owned LDC is sold to the private sector. There is precedent for such co-operation as illustrated by the previous federal *Public Utilities Income Tax Transfer Act*. (Page 331.)

2 In this *Commentary*, we use LDCs when our discussion applies in general to municipally and privately owned electric utility companies; we also use MEUs when referring specifically to municipally owned electricity utilities.

3 In January 2004, the Ontario Energy Board, the licensor and rate regulator of most of the distribution sector, launched a consultation to address "whether there are economic, service and other benefits to be gained from further consolidation of the electricity distribution sector" (Ontario Energy Board, Jan 21, 2004, Notice RP-2004-0020). In December 2004, the province started its own consultation to "guide the government in developing a policy framework" to achieve "further efficiencies in the electricity distribution sector through voluntary consolidation." (Ontario 2004). Neither of these initiatives led to any conclusions. The Ontario Energy Board has more recently announced another consultation to look at "efficiency gains through economics of scope, economies of scale or consolidation" (February 11, 2013 Notice EB-2012-0397).

The premises of the Panel Report are twofold: first, that there are too many distributors in Ontario; and, second, that the government should encourage or force consolidation. These premises are, however, logically independent from each other: even if there are too many distributors in light of potential scale economies, the case for a government-directed consolidation should be examined on its own merits. And the premises are worth reviewing critically: it is not at all clear that there are too many distributors, and even if the current industry structure is not efficient, the potential for capturing these efficiencies through voluntary consolidations is uncertain and the case for mandatory consolidations is dubious, at best.

In our view, the case for consolidation as a cure for the need for new capital investment is flimsy. If the distribution sector requires a level of investment that cannot be secured from current, mainly public sector shareholders, then the government should remove barriers to new sources of investment. In particular, it should remove tax barriers that effectively prevent the private sector from investing in the distribution sector.

Are There Too Many Electricity Distributors in Ontario?

On the first point, it is not clear that there are too many distributors in the sector. There is an unclear relationship, from an economic perspective, between distributor size and costs. The evidence from both Ontario and the United States suggests that a structure dominated by larger utilities is not necessarily lower cost or higher quality than one with much smaller utilities. In fact, Ontario's experience is that a lower number of distributors has not been accompanied by lower administrative costs across the system.[4]

This is not to deny the intuitive reasoning behind scale economies – clearly, they exist. Fixed system costs can be large relative to a small customer base, and variable costs such as administration can also be large when serving the first few customers. However, electricity distribution costs can be driven by customer density, engineering configuration, and geographical location. Even those costs, such as utility billing, that lend themselves to being spread out over a larger customer base can be and have been captured by many Ontario utilities in the form of cooperatives or buying groups.[5]

4 The focus of this *Commentary* is on the potential to reduce administrative costs. In contrast, the Panel Report focuses less on administrative costs than on the total of operations, maintenance, and administrative (OM&A) costs per customer, but, in our view, using OM&A as a way to measure efficiency gains is problematic. Operating and maintenance costs can be influenced by the capital budgeting programs of LDCs. All other things being equal, a fast growing utility will generally show much higher OM&A unit costs than its slower growing counterpart. Differences in accounting practice can also lead to large differences in reported OM&A. Accounting rules allow for various interpretations of the amount of current or overhead costs that may be capitalized. For example, in 2011 Atikokan Hydro Inc. (1,660 customers) capitalized just 1.5 percent of its labour costs whereas Guelph Hydro Electric Systems Inc. (50,850 customers) capitalized over 56 percent of labour cost (2012 OEB Rate Filings EB-2011-0293 and EB-2011-0123 filings respectively). The result is that only 44 percent of Guelph Hydro's labour costs are reported as OM&A as compared to 98.5 percent in the case of Atikokan Hydro. Administrative costs share these issues but to a lesser extent as they are less reliant on capital budgeting programs of the LDC. Capitalization practices will become more uniform as LDCs make the required move from Canadian Generally Accepted Accounting Practice (CGAAP) to International Financial Reporting Standards (IFRS).

5 A case in point is the Cornerstone Hydro Electricity Concepts, under which 16 Ontario utilities share resources. The Panel Report notes this practice, but states (page 23) that this cannot be a template because it is voluntary. It is not clear why this is a limitation.

Although many LDCs are smaller than the optimal size, diseconomies of scale suggest that creating a few very large LDCs from a number of smaller LDCs might not be the most economically efficient outcome (Figure 3). This should not be taken to suggest that a policy of small utilities is superior to one that encourages large utilities, but our conclusion on the Panel's first premise is therefore an equivocal one: a more concentrated distribution structure might or might not lead to lower cost or better service – it depends on the specific mergers and amalgamations that emerge. In other words, utility size does not, by itself, dictate utility cost performance.

This equivocal conclusion might not satisfy ambitious policymakers, but it is impossible for them to predict which mergers and amalgamations will be successful. In the broader economy and among electricity companies, most mergers and amalgamations are not successful at increasing shareholder value (Becker-Blease, Goldberg, and Kaen 2008). It is difficult to merge companies, and the success of a merger is driven by how managers address cultural factors within the merged firm. Ambitious policymakers cannot design a merger policy that will make all mergers successful or that will permit successful mergers to go forward while blocking unsuccessful ones. Participants in potential mergers should evaluate their likely success on a case-by-case basis and by reference to the performance of the merged entity. There is no *a priori* model that predicts successful mergers.

Should Ontario Force Consolidation of Electricity Distributors?

The equivocal conclusion on whether there are too many distributors leads us to an unequivocal policy prescription: the Ontario government should not adopt a policy that forces or encourages LDC consolidation. Instead, it should reform its policies so that they do not impose barriers on LDC investment but permit the pursuit of commercially sensible mergers.

Current provincial regulatory policy is neutral toward mergers of publicly owned utilities. The Ontario Energy Board (OEB) applies a "no harm test" to evaluating mergers and acquisitions – that is, provided a merger does not harm customers in terms of reliability and price, the OEB's practice is to approve it. The Board does not require merging LDCs to demonstrate that customers are better off as a result of the merger (see Ontario Energy Board 2005); indeed, the Board has never turned a merger down. The Panel Report recommends, however, that this policy not be applied and that all "voluntary consolidations should be deemed by the province to have delivered a net benefit to customers" (Panel Report, page 36).

Ontario tax policy is also neutral toward mergers of publicly owned LDCs, but restricts private sector participation in the sector. As a consequence, tax policy prevents any consolidations led by commercially owned companies. In our view, the province should remove barriers to private sector investment in the distribution sector, which would permit the experimentation and trial and error that is required to separate successful and unsuccessful mergers.[6] We believe that the success or failure of those mergers should be determined by the market, not by government fiat.

6 Arguably, the OEB does not permit shareholders from benefitting from successful acquisitions. This results from the OEB's policy of transferring the benefit of efficiency savings from shareholders to ratepayers after a fixed period. Whether this policy encourages or discourages mergers is a complex issue, and is tied in with the OEB's more general approach to resetting the cost base for electric distribution companies every four years – soon to be every five years (see Ontario Energy Board 2012).

Reform of Electricity Distribution Policy

Policymakers in Ontario's LDC sector should consider the following as they embark on reforms:

- There is no obvious relation between the size of a distributor and the cost of providing distribution services.
- Mergers in the distribution sector have not proven to have increased economic efficiency, either through customer value or increased profitability.
- Rather than focus policy reforms on the need for mergers or the appropriate scale of LDCs, the most important question to ask is whether, in light of increased capital requirements in the sector, Ontario should continue to restrict the availability of private sector investment. The government's policy should be one of neutrality between private and public investment; it can achieve this neutrality by eliminating taxes on sales of LDCs to private companies.
- To preserve the provincial tax base if Ontario were to eliminate taxes on the sale of LDCs to private companies, the federal government should consider either (i) amending the ownership test under the federal income tax rules applicable to municipal corporations to allow LDCs to remain tax exempt with as much as 49 percent private ownership; or (ii) introducing a transfer tax system similar to the former *Public Utilities Income Tax Transfer Act*, where Ottawa remits to the province corporate taxes it collects from privatized utilities.

The Practice and Theory of LDC Consolidation

Prior to the 1998 *Electricity Act*, municipal electrical utilities (MEUs) were departments within municipalities, much like water services still are, and municipalities saw electricity distribution as a public service to their residents. The MEUs' rates and terms of service were regulated by Ontario Hydro, the provincially owned, vertically integrated power generation, transmission, and distribution company, which has since been dismantled.

The *Electricity Act* transferred regulation of the sector to the OEB, an economic regulator with almost 40 years of experience regulating the province's privately owned natural gas utilities. The policy of utility corporatization was designed to work in tandem with the new electricity power market by transforming electricity distribution from a public service activity to a commercial activity. The privatization of MEUs was unlikely to happen, however, because of the payments-in-lieu-of-corporate-taxes (PILs) regime, which we discuss in further detail later in the *Commentary*. The PILs policy was a result of the province's need to prevent revenue leakage as a means of paying down electricity sector debt, rather than a policy aimed at keeping private capital out of the distribution sector.

In 1998, when the *Electricity Act* was passed, there were more than 300 MEUs, reflecting their status as municipal services. That number shrank to about 120 as a result of two major initiatives. First, municipal amalgamation carried with it, by necessity, the amalgamation of MEUs; the initial distribution sector consolidations thus were a result not of electricity policy, but of municipal policy. The second phase of consolidations occurred when Hydro One, the provincially owned distribution and transmission service provider, acquired a large number of "virtual utilities." Ontario Hydro had until then operated many of these LDCs under contract.

Concurrent with these consolidations, the OEB began rationalizing its regulation of the distribution sector. This included unbundling the pre-*Electricity Act* integrated rate structure to create separate power, transmission, and distribution components of the electricity bill. The OEB also began to remove rate distortions that arose from the influence of municipal politics in the distribution sector, such as cross-subsidization between business and residential ratepayers and electricity usage subsidies for industrial users. The OEB introduced more rigidly applied cost-of-service rates and a series of complex codes, rules, and operational requirements, as well as an adjudicative rate-setting process.

This first phase of restructuring was largely complete by the mid-2000s. A slower consolidation of municipal utilities began after the end of the provincially mandated electricity price freeze in 2005, so that there are now 76 rate-regulated LDCs. The second phase of mergers was more generally undertaken by new leadership in the distribution sector and under municipal councils that, with less discretion over rates and facing fiscal challenges, focused on increasing the financial returns from their distribution assets.[7]

The Panel Report observes that, during the period of merger activity, there were a number of successful mergers, but since this "flurry of mergers and acquisitions," the pace "has slowed to a snail's pace" (page 6). The report does not, however, explain why that is the case or why that should be a problem. The simplest explanation – which the panel does not consider – is that, given the lack of tax or other barriers to consolidation within the public sector,[8] the low-hanging fruit among publicly owned utilities have already been picked. In other words, voluntary merger activity in the sector as currently structured appears to have been achieved. This suggests that, just like any other business, company shareholders who do not pursue mergers might be acting rationally. Yet the Panel Report takes a somewhat unbalanced approach to this fact. On the one hand, it argues that "the distribution sector should be treated the same as other corporations in Ontario." On the other hand, it recommends approaches that would be unthinkable for other corporations – including forced consolidations and restrictions on how shareholders who sell utilities may dispose of the proceeds of sale (Panel Report, pages 37–8).

Consolidation in the Distribution Sector

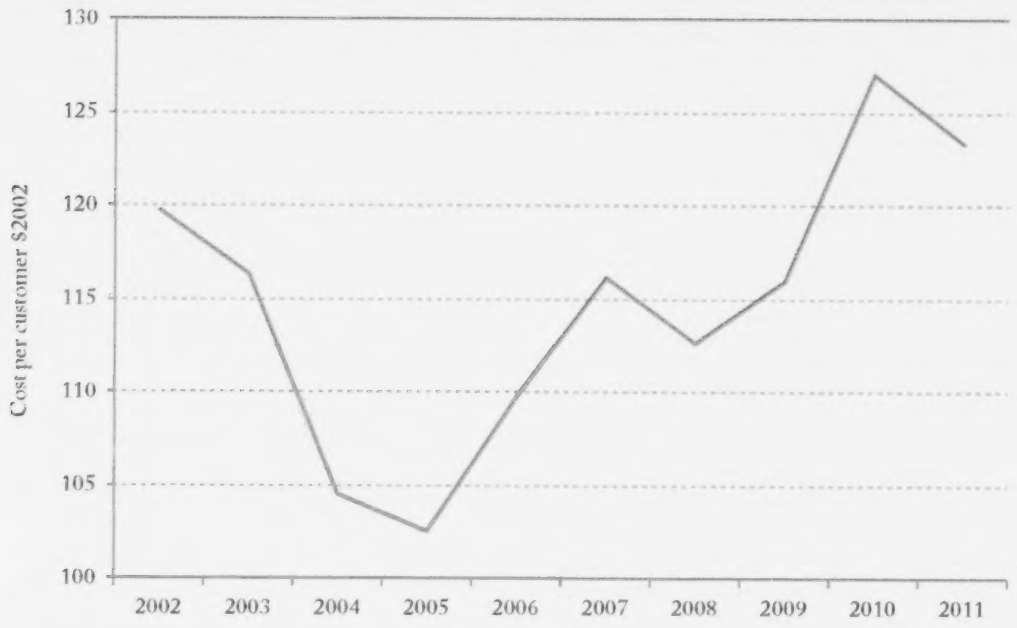
Since the Ontario distribution sector has been reduced from approximately 300 LDCs to 76, what does that experience tell us? The answer is not straightforward. Many of the initial consolidations were the result of Hydro One's acquisition of a number of smaller utilities. There are, however, few data on the costs and benefits of those mergers; the OEB publishes data on distributors beginning only in 2002, making comparisons to LDC costs before these large-scale consolidations difficult. Nonetheless, we can offer some useful statistics. In 2002, 91 utilities served 4.3 million customers; today, 76 LDCs serve 4.8 million customers. Total administrative costs throughout the Ontario LDC system increased, in real 2002 dollars, from $515 million in 2002 to $597 million in 2011, while total administrative costs per customer increased from slightly more than $100 per customer in 2005 to more than $120 per customer in 2011 (Figure 1).

If we distil our analysis of the size of utilities to quartiles of the number of customers LDCs served in 2002, we see that those in the first quartile had fewer than 8,800 customers, those in the second quartile served between 8,800 and 28,000 customers, those in the third quartile had between 28,000 and 92,000 customers, and the fourth quartile LDCs served more than 92,000 customers. Between 2002 and 2011, the largest utilities (as measured by the number of customers), including Hydro One, grew still larger, serving an average of 156,000 customers in 2002 and an average of 210,000 in 2011, an increase of 35 percent. At the same time, their administrative costs per customer (in 2002 dollars) grew from an average of $117 per year in 2002 to $122 per year in 2011 (Figure 2).

7 Also, the number of LDCs that chose to operate as not-for-profits under Board rules (which limited them to a 3-to-4 percent return) declined significantly between 2003 and 2008. The analysis in this *Commentary* is based on LDCs listed in the OEB Yearbook of Electricity Distributors.

8 Indeed, this was "a move designed to encourage consolidations among municipal electrical utilities" (Ontario 2008).

Figure 1: Administrative Costs per Customer, Local Distribution Companies, Ontario, 2002–2011



Sources: Authors' calculations from Ontario Energy Board and Bank of Canada.

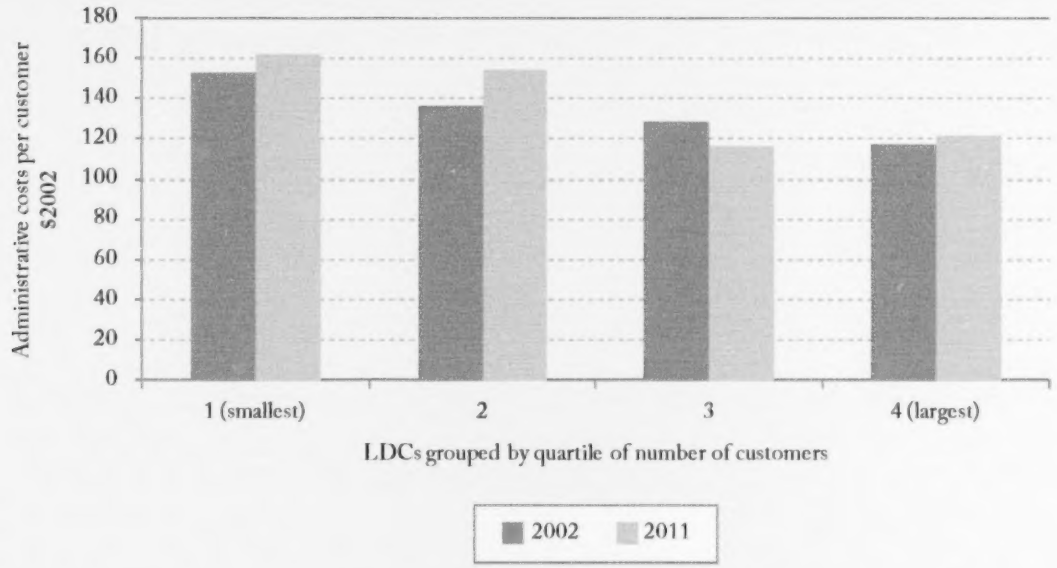
The smallest two quartiles of LDCs – those with fewer than 28,000 customers – grew by 26 percent from 2002 to 2011, as did their real administrative costs per customer. In contrast, mid-size LDCs (the third quartile) grew by 13 percent from 2002 to 2011, but their real administrative costs per customer were lower in 2011 than in 2002. This pattern of higher costs in the top and bottom of the distribution of LDCs relative to mid-size LDCs suggests that there is no clear linear relationship between LDC size and administration costs, a point to which we return below when we look at more disaggregated data on Ontario LDC costs.

The reduction in the number of distributors did not lead to a reduction in the cost of regulation. In 2002, when the OEB regulated more than 90 LDCs, its operating costs were $18.6 million (Ontario Energy Board 2002, page 26); in 2011, when it regulated 76 LDCs, its operating costs had risen to $34.9 million (Ontario Energy Board 2011a, page 20) – although, to be fair, its mandate expanded considerably over the period. The point is that, much like administrative costs in the distribution sector, the costs of OEB regulation are driven by much broader factors than the number of LDCs it regulates.

Economies of Scale in Distribution

Economies of scale "are factors that cause the average cost of producing something to fall as the volume of its output increases." (*The Economist* 2008). However, it is difficult to identify economies of scale, as they can be measured across firms, industries, or regions. In addition, pecuniary economies that result from increased scale – such as increased bargaining power for a merged company – and "real economies," which address

Figure 2: Administrative Costs per Customer by Quartile of Number of Customers, Local Distribution Companies, Ontario, 2002 and 2011



Sources: Authors' calculations from Ontario Energy Board and Bank of Canada.

resource cost savings, are two different things. From the perspective of maximizing social utility, "real economies are socially beneficial and should be encouraged; pecuniary economies merely reflect redistribution of income between buyers and sellers (Viscusi, Vernon, and Harrington 2000, 195–6)." As well, one must distinguish between real economies and benefits to customers. Economies of scale are measured by the increase in total welfare, which includes the sum of producer surplus (profits) and consumer surplus (lower price or improved service). If the same service can be provided at the same price with a higher profit margin, there is a producer surplus that, all things being equal, will result in a total welfare gain. This improves economic efficiency, but it does not necessarily lead to lower prices or better services for customers.

A natural monopoly – a firm that can produce the entire output in a market at a lower cost than a group of competing firms – might be possible in an industry with high fixed costs. For example, the cost of creating multiple competing electricity networks in a market might be prohibitive and would leave economic welfare otherwise lower. In a market where the firm is a natural monopoly, the economically efficient outcome is to have a single firm. But once a firm has exhausted the available scale economies and begins to exhibit diseconomies of scale, it is no longer a natural monopoly, and a market with only one firm can no longer maximize economic welfare. The relevant question then becomes, over what quantities of output is the firm a natural monopoly?

Economies of Scale in Canada and Elsewhere

How, then, is it possible to measure empirically whether economies of scale are present? This is more difficult than might be commonly assumed, and has often proven elusive (see Junius 1997).

In the United States, for example, LDC size and cost show no clear relationship. The United States has many examples of publicly owned and investor-owned utilities, each with its own structure: the latter are both larger and more concentrated, while the former are smaller and much more dispersed. Although a number of different factors make it difficult to determine and compare the efficiency measures of publicly and privately owned companies, and one should be careful about drawing any simplistic conclusions about which sector operates more efficiently, the data suggest that the cost of distribution services is lower in the more dispersed publicly owned utility sector. For example, the average cost per kilowatt hour for US investor-owned utilities is $0.096, while that for publicly owned utilities is $0.088. Thus, even given scale economies in the distribution sector and even though investor-owned utilities are 10 times the size of publicly owned utilities, customers of publicly owned utilities in the United States pay, on average, 8 percent less for distribution services. Some issues, such as targeted rates of return and different tax treatment, might confound comparisons of the relative costs of publicly and privately owned utilities; nevertheless, the magnitude of the variation in costs is reason to suspect that utility size might not correlate with cost of service.

As discussed above, the complexity of measurement thus might be the reason analysts often disagree over whether the Ontario electricity distribution sector exhibits scale economies. One study finds "substantial evidence of increasing returns to scale with minimum efficient scale being achieved by firms with about 20,000 customers. Larger firms exhibit constant or decreasing returns" (Yatchew 2000). Other studies (for example, Cronin, King, and Colleran 1999; Cronin and Motlock 2007) have found diseconomies beyond moderate size and little to no evidence of cost savings from increasing utility size or from mergers, and suggest that the largest cost savings would have emerged from changes in regulation – specifically by reducing the utilities' degree of capital investment. Further, these studies find that utilities that increase the scope of their services – providing multiple outputs, rather than just electricity – experienced the largest cost reductions. Lowry, Getachew, and Fenrick (2008) find that, after controlling for other factors that might affect costs – such as the share of an LDC's lines that are underground or its geographical location in the province – total operating, maintenance, and administration costs for the mean Ontario LDC increased by slightly less than 1 percent for every 1 percent increase in output over the period from 2002 to 2008. They suggest that, for the mean LDC, the unrealized economies of scale are small, but that larger LDCs have a material cost advantage over smaller utilities (page 54). However, even this conclusion must be tempered by observed reality. For example, while Hydro One acquired one large urban utility, Hydro One Brampton, it chose, presumably for reasons of efficiency, to operate the utility as a subsidiary of the main corporation.

This is not to deny that there might be economies of scale in the distribution sector among the smallest LDCs. Figure 3, which plots LDC cost against LDC size using 2011 data,[9] shows a

9 We isolate the administration cost component of LDCs that are not correlated with density – which the LDC cannot control – through basic ordinary least squares regression analysis. Specifically, we regress administration costs per customers on customer density (the number of customers per square kilometer). By regressing out the relationship between customer density and costs per customer, this leaves a residual that, by definition, is unexplained by customer density. Figure 3 plots these residuals from the regression against LDC size. We exclude capital costs and operations and maintenance costs, making this an oversimplification of LDC costs.

declining cost curve for LDCs with fewer than 100,000 customers. It also appears, however, that, similar to the finding of Yatchew (2000), there are diminishing returns to scale – and perhaps diseconomies of scale – for LDCs in markets beyond that size, although we caution that, as with the comparison of US utilities, this is a severe oversimplification of an appropriate cost function.[10] Other municipal services in Ontario, such as fire and police services, exhibit similar diseconomies of scale beyond 20,000 and 50,000 residents, respectively (Found 2012).

Given these results, it is not clear what economies of scale are to be gained by consolidations in electricity distribution that would yield more than about 100,000 customers per utility. Although tax penalties restrict private capital engagement, no such barriers exist for publicly owned utilities, which might have amalgamated where they presumably saw value in doing so. The regulator has implemented rate policies that allow utilities to return some of any new-found value to the municipal shareholder. Presumably, the small utilities that remain are either efficiently run, sufficiently isolated to make them unattractive acquisitions, or are themselves hostile to being acquired by other municipally owned LDCs they judge to be unattractive.

So, the question arises: what government policy is superior to the current policy of neutrality? Put another way, how do policymakers find the undiscovered value that, after 10 years, has escaped the notice of the publicly owned sector? In sum, the presence of scale economies, or the lack thereof, starts the discussion; it does not end it.

From the Theory of Scale Economies to the Reality of Effective Mergers

The question now is: even if there are scale economies in distribution, would mergers lead to greater efficiency? Addressing this requires policymakers to consider the practical ability of LDC managers and owners to turn theoretical gains into improvements to the firm.

Why Do Mergers Fail or Succeed?

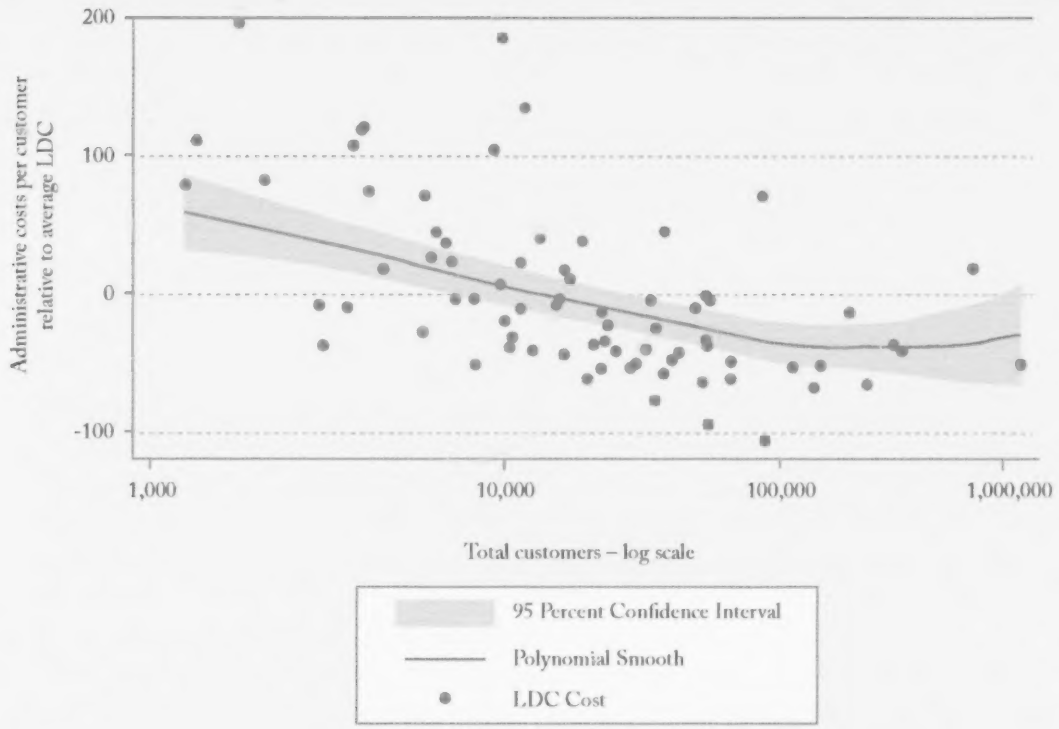
On paper, all executed mergers look like a good idea – that is why managers and shareholders pursue them. Even when faced with low statistical prospects of success, merging companies tend to believe they will beat the odds because they believe they will succeed where others have failed. Kahneman (2011) has coined the term "planning fallacy" to describe the tendency for plans and forecasts to be "unrealistically close to best-case scenarios and could be improved by consulting the statistics of similar cases" (page 50).

The overly optimistic symptoms that describe the planning fallacy are at work in the mergers and acquisitions area. An extensive literature shows that mergers fail to deliver higher returns for bidders and/or the owners of purchase targets (see Cartwright 2002; Ray et al. 2002; Becker-Blease, Goldberg, and Kaen 2008; and Kwoka and Pollitt 2010). Despite the high failure rate of mergers, optimistic planners not only think they will succeed where others have failed; they often think they have succeeded when they have failed. Indeed, in the case of failed mergers, the large majority of those who made the decision to merge thought their acquisition had created value.[11] Given the

10 For example, we impose a specific parameterization of the cost function in the regression of costs on density, which might not be appropriate.

11 See "Mergers and Acquisitions," University of Pennsylvania, Wharton School, Aresti Institute of Executive Education; available online at: http://executiveeducation.wharton.upenn.edu/open-enrollment/finance-programs/mergers-acquisitions-program.cfm.

Figure 3: Administrative Costs per Customer Relative to Average, Local Distribution Companies, Ontario, 2011



Note: Fitted line uses local polynomial smoothing.
Source: Authors' calculations from Ontario Energy Board.

influence of the planning fallacy, it is important that policymakers avoid overconfidence in a preferred policy outcome. A centralized decision of mandatory consolidation could be more harmful than allowing individual LDCs to make a variety of decisions, recognizing that many of them (whether merging or not) are unlikely to be successful.

It is thus important that mergers be driven by the specific implementation plans of managers. There is a particular difference between voluntary and forced consolidations: voluntary consolidations, like all mergers, have considerable challenges, but forced consolidations have virtually no chance of success. Drucker (1999, page 241) argues that successful mergers are collaborations between two merging companies, and that "financial ties alone are insufficient; in social science jargon, there has to be a 'common culture' or at least a 'cultural affinity.'" We do not have to look far for the limitations of forced mergers. In 1998, municipal amalgamations in Ontario were forced upon municipalities by the provincial government; it does not appear that the hoped-for savings have materialized (see Bish 2001; Martin 2001).

The point here is not to argue against mergers, but to note that success depends on post-merger implementation to realize efficiencies. This suggests three things:

- that forced consolidations are unlikely to succeed: a shotgun wedding will not lead to an effective marriage;
- it is not possible for policymakers to predict which merger candidates should be brought together, whether by size, geographical location, topography, or any other indicator, and any attempt to do so would involve nothing more than picking winners and losers based on political, not economic, criteria; and
- any discussion of merger policy should take into account whether the merged firm is better suited to the future electricity environment than the previous constituent firms.

The Post-merger Scenario

One crucial factor that policymakers and LDC owners and managers should consider in evaluating a merger is how the new company will fare in the future environment. In other words, their determination of whether or not the merger will be a success should apply to the new company, not to the merger transaction. Such a consideration, however, has not been part of merger discussions to date.

The Panel Report, for example, does not provide much information on how its proposed eight-to-twelve regional utilities would operate, their governance, or who would own them. But the provincial government cannot consider consolidation policy unless it determines the nature of the consolidation. The report proposes that the regional LDCs be geographically contiguous – indeed, it is insistent upon this point, and argues that the mergers that have proceeded under the current structure are inadequate because they are not contiguous. The report provides an indicative map of utilities, but leaves it to the government – through legislation – to draft the boundaries. This approach, however, favours a model of public sector consolidation instead of private sector mergers. The issue is not one of semantics: private market analysts characterize market mergers and acquisitions by an analysis of intrinsic value, unrealized potential, and estimating synergies, while policymakers are apt to describe consolidations as the opportunity for monetary (budget) savings. It is important to bear in mind that, although we apply the term "mergers and acquisitions" to describe public sector consolidation, it is a misnomer. In fact, mergers and acquisitions are how private sector companies acquire other companies as part of their competitive strategy, but when a government consolidates agencies it is performing a different function: it is carrying out a policy function. This is why the role of government should be central to the discussion.

In particular, the Panel Report's proposed model would facilitate the ability of the province to treat the regional entity as a policy instrument like the provincial agencies it owns or oversees. It is not clear, however, why the public interest would be better served by creating a small number of distribution companies under the control or direction of the government. To address this point, it is helpful to consider the experience of the provincial government's involvement in electricity distribution and in the broader energy sector.

The Distribution Sector and Energy Policy

Over the past 10 years, provincial policymaking has largely replaced municipal policy objectives in the distribution sector in Ontario. Prior to 2000, municipal utilities were seen as a way to enhance local economic development through specialized industrial rates. The OEB largely eliminated rate-class cross-subsidization as part of a more rigorous application of the principle of cost causality. Since then, the province has introduced broader and more ambitious policies centred on the development of a smart electricity grid, green energy and conservation, and industrial demand-management programs. Energy policy has become a key component of provincial industrial policy, as demonstrated by the Feed-in-Tariff program, which is a tool of the government's policy to expand renewable power manufacturing in the province.

LDCs have played an important role in implementing the province's expanded energy policy. Since 2005, Ontario has required that LDCs implement and fund conservation and demand-management programs, compulsory central repository smart metering, and the development of a green energy plan. In 2007, the Ontario legislature enacted the *Green Energy and Green Economy Act*, granting the provincial government considerable power to use the distribution sector to pursue policy objectives. Specifically, it empowered the government (through directives issued to the OEB) to impose conservation targets on LDCs, to require LDCs to provide priority connections to renewable electricity-generating facilities, and to implement the government's smart-grid policies.

LDC Consolidation and the Smart Grid

Perhaps the main argument of the Panel Report is that consolidation is required to take advantage of scale economies so that LDCs are in a financial position to make smart-grid investments. It is difficult to estimate the amount of money the distribution sector will invest in infrastructure or the component of this cost that would be attributable to smart-grid technology; there has also been no attempt to quantify the benefits of these investments.[12] However, every government agency that has participated in various smart-grid initiatives has agreed with the government's statement that the smart grid "is a smart investment in our clean energy future and our economy."[13]

The Panel Report shares this consensus, but again provides little empirical evidence to support it. Indeed, it goes so far as to argue that the investment required for smart-grid initiatives such as electric vehicles, energy storage, and distributed energy cannot be achieved under the current system. It also argues that all distributors should be required to provide 24/7 services, without any review of the costs and benefits of such an expensive service. What the Report does not ask is if these investments are beneficial to consumers or best made by monopolist LDCs.

If the consolidation moves forward in the manner recommended, it is likely that the government will be in a position to develop new initiatives that are more easily implemented under a new centralized structure than is currently the case. This seems driven, not by "Putting the Consumer First," as the subtitle of the Panel Report would suggest, but by increasing the levers through which the provincial government seeks to control the energy sector. It is hard to see what problem this is meant to solve.

In addition to the costs of implementing provincial green energy policy, many LDCs face large capital requirements to maintain distribution assets. Even though distribution assets can have useful lives as long as 50 to 60 years, much of the system installed in the expansion between 1950 and 1980 is in need of costly replacement. These capital requirements may be real, but there is no reason to believe that a pro-merger policy is the best way to meet them. Rather, as we argue below, removing systematic tax barriers to private sector investment

12 The Ontario Smart Grid Forum was unable to make an unqualified prediction of the cost of investment; instead, it "extrapolated" that "public spending on the smart grid over the next five years would amount to about $390 million per year" for four large utilities (Ontario Smart Grid Forum 2011, page 29). An OEB discussion paper includes an examination of ways to measure the costs and benefits of smart-grid investment, but it draws no conclusions (Ontario Energy Board 2011b).

13 See Ontario, Ministry of Energy, "Smart Grid"; available online at: http://www.energy.gov.on.ca/en/ontarios-electricity-system/smart-grid.

in the distribution sector is more likely to facilitate capital investment.

A Policy for Moving Forward

We emphasize that the point is not that mergers in the distribution sector should be discouraged, but that there is little evidence to suggest mergers would lead to efficiency gains; other than for the smallest utilities, there is no reason to believe there is an optimum utility size. Instead, the prudent policy for the provincial government should be one of neutrality, not to seek to drive industry to consolidate or not. As it stands however, government policy is not neutral. It is bifurcated into two worlds. In one, municipally held LDCs or MEUs have over time consolidated to presumably what is an efficient equilibrium from an economic or political perspective. The other world is characterized by a small number of privately held LDCs. Bridged between these worlds is a small private stake of 10 percent in a number of publicly held utilities. In our view, these two worlds should be completely bridged to allow 100 percent private ownership. This would lead to renewed activity in the sector and "natural consolidations" in which the risk of amalgamation is shared by the private sector.

Ontario currently has a bifurcated ownership policy: with minor exceptions, utilities that were privately held prior to 1999 remain in private hands, while those that were publicly owned remain so.[14] Policymakers now must address the issue of ownership. Ontario tax policy also effectively maintains (with some exceptions that we discuss below) the ownership status quo. Since the introduction of the *Electricity Act*, consolidations, acquisitions, and mergers have occurred on both sides of this ownership divide, but this voluntary activity has largely ended as both private and public owners have exhausted perceived opportunities. For activity to continue, the province must either create a policy framework of incentives or force consolidation by fiat. The basis for the latter is unknown, and the chances of its proving successful in increasing efficiency in the distribution sector are slim.

Tax Treatment of Mergers and Acquisitions

If we accept that the objective of consolidating LDCs to achieve cost efficiencies is a questionable proposition, and that neutrality should be the focus of government policy, what types of legislative changes would achieve that goal? The current tax regime impedes private sector investment by imposing both a departure tax on the entity and a transfer tax on the underlying assets where a non-municipal government entity makes an investment in the entity. To date, private sector investment has been limited to some combination of debt, 10 percent equity, and one complicated leasing structure. To achieve broader equity participation, these prohibitive tax costs will need to be eliminated with the help and cooperation of the federal government. Two possible approaches are an amendment to the ownership test under the federal income tax rules applicable to municipal corporations; and the introduction of a transfer tax system similar to the former *Public Utilities Income Tax Transfer Act*.

The Current Tax Regime

Ontario's electricity distribution sector has been slow to embrace private investment. This reluctance is likely due in large part to tax-related impediments. Although tax policy has encouraged consolidation in the government sector, it has also hindered

14 To add to the somewhat confused policy landscape, while all publicly owned utilities are subject to the OEB's oversight, one private utility, Cornwall Electric, is not subject to the Board's regulation.

significant private sector participation in the corporate finance of municipal electricity utilities (MEUs).[15] The current tax regime established under the *Electricity Act* combines three separate streams of tax rules. The first stream consists of the rules in the federal *Income Tax Act* relating to the taxation of municipally owned corporations. The second and third streams are the payments-in-lieu-of-corporate-taxes (PILs) regime[16] and the transfer tax regime created by the *Electricity Act* itself.

Under the federal rules in the *Income Tax Act*, an MEU is exempt from income tax for a taxation year if it satisfies two tests. One is an ownership test that requires one or more Canadian municipalities to own not less than 90 percent of the corporation's capital.[17] Options and rights to acquire the corporation's shares and any circumstances that give a third party factual control over the shares are taken into account in determining such share ownership.[18] The second test relates to the MEU's source of income, and generally requires it to restrict its income-producing activities to activities carried on within the geographical boundaries of its municipal shareholders; however, 10 percent of its income for a taxation year may come from activities carried on outside such boundaries. In addition, some types of income are excluded from the source-of-income test.[19] The same two tests apply in the determination of whether an MEU is exempt from income tax under Ontario's *Corporations Tax Act* for a taxation year.[20]

Under the PILs regime, an MEU must pay a proxy tax if it is exempt from tax under both the federal *Income Tax Act* and the Ontario *Corporations Tax Act* for a taxation year; it is also subject to a "departure" tax if it ceases to be tax exempt. The PILs proxy tax is intended to replicate the normal corporate tax otherwise payable by an MEU if it were not tax exempt. An MEU that loses its tax-exempt status because, for example, a private investor acquires more than 10 percent of its capital, is subject to a significant departure tax liability triggered by the deemed disposition of all of its property.[21] The MEU's disposition proceeds are based on the current fair market value of the property. The amount by which those proceeds exceed the cost amount of the property will generate a combination of recaptured depreciation and capital gains subject to the PILs tax.[22]

15 An MEU, as defined in subsection 88(1) of the *Electricity Act*, is a corporation established pursuant to section 142 for the purpose of generating, transmitting, distributing, or retailing electricity, or a subsidiary of such a corporation, provided that a municipal corporation holds a direct or indirect interest in the corporation or subsidiary. An MEU includes a municipally controlled LDC and any other entity that is part of that ownership group.

16 The PILs regime consists of section 93 of the *Electricity Act* and the rules for determining the PILs payable by an MEU for a taxation year contained in Ontario Regulation 162/01 to the *Electricity Act* (the so-called PILs regulation).

17 *Income Tax Act*, paragraph 149(1)(d.5). An MEU subsidiary would lose its tax-exempt status if it issued even a single share to a third party (paragraph 149(1)(d.6)).

18 *Income Tax Act*, subsection 149(1.1).

19 Under subsection 149(1.2) of the *Income Tax Act*, income from certain regulated activities, such as the distribution of electricity, is not included in the source-of-income calculation. Therefore, electricity distribution revenues arising anywhere in Ontario would not be subject to this 10 percent restriction. Also excluded from the calculation is income derived from activities carried on under a contract with the Crown or a government-controlled entity.

20 *Corporations Tax Act*, R.S.O. 1990, c. C.40, paragraph 57(1)(a) and subsection 57(4).

21 The MEU's subsidiaries will also be subject to the departure tax. Although the current tax regime contains specific rules relating to the tax treatment of MEU subsidiaries that may differ from the rules applicable to their parent MEUs, a detailed discussion of those rules is outside the general scope of this *Commentary*.

22 PILs regulation, subsection 12(2).

Under the transfer tax regime, an MEU (unless otherwise exempted) must pay a 33 percent tax on its actual or deemed transfer of any interest in real or personal property used in connection with generating, transmitting, distributing, or retailing electricity – referred to as "electricity property" – subject to certain exceptions.[23] The transfer tax is levied on the gross value of electricity property.[24] The transfer tax payable by an MEU on the transfer of electricity property has broader application than the PILs regime: the MEU will continue to be subject to the transfer tax even when it loses tax-exempt status, as long as a municipal shareholder retains a direct or indirect ownership interest in it. As a result, only two outright divestitures to the private sector have occurred, and one of these was structured as a long-term lease, which has its own set of complexities.

Tax-related Roadblocks to Private Sector Investment

The principal roadblocks to private sector involvement in LDC consolidation are the departure tax and the transfer tax. Any private sector equity investment in an MEU that exceeds a 10 percent share ownership will cause the MEU to lose its tax-exempt status and leave the PILs regime. For many corporations holding distribution assets, this departure tax will be a significant amount.[25] The second roadblock to private sector investment is the 33 percent transfer tax. Financing an MEU with private sector debt increases the gross value of the MEU's underlying electricity property, thereby increasing the MEU's potential transfer tax liability when it sells that underlying property. However, the MEU cannot claim a credit for the amount of debt it incurred to reduce its transfer tax liability on a future transfer of the electricity property. The only amounts an MEU may claim to reduce the transfer tax payable on a transfer of the electricity property are its previous PILs payments.[26]

Several deeming rules in the *Electricity Act*'s transfer tax regulations also complicate private sector investment. For example, where a corporation ceases to be a subsidiary of an MEU, all of its electricity property is deemed to have been transferred to another person.[27] Also, the parties to an amalgamation agreement are considered to have disposed of electricity property upon the merger, unless the merger involves certain related MEUs. If a private sector corporation participates in the merger, however, the usual rollovers for certain horizontal and vertical mergers of MEUs are not available.[28]

23 For the purposes of applying this tax, an interest in electricity property includes any interest in a corporation, partnership, or other entity that derives its value in whole or in part from electricity property.

24 The key tax considerations are the provisions relating to: (1) the taxation of municipal corporations described in the *Income Tax Act*, paragraphs 149(1)(d.5) and (d.6); (2) the PILs tax regime described in the PILs regulation; and (3) the transfer tax described in the *Electricity Act*, section 94, as supplemented by Ontario Regulation 124/99, which provides rules for calculating the transfer tax payable by a municipal corporation or an MEU under section 94 of the *Electricity Act*.

25 The departure tax has a potential cascading effect because each subsidiary of the MEU also loses its tax-exempt status as a result of an ownership change at the top, and is therefore subject to a departure tax on its asset base. Subsection 11(2) of the PILs regulation provides some relief for the possibility of "cascading tax."

26 There is also a partial tax credit for the Ontario portion of corporate taxes paid if the MEU has lost tax-exempt status, and for federal capital gains tax on the actual sale of electricity property.

27 Ontario Regulation 124/99, subsection 2(3).

28 Ibid., subsections 2(5) and 3(8).

Returning a municipal shareholder's investment in an MEU also becomes more difficult when private investors participate in the acquisition of an MEU. An amount paid to a shareholder as a return on an investment will result in the deemed disposition of electricity property for proceeds equal to the amount the shareholder received, and will be subject to transfer tax unless an exemption is available.[29]

Tax Policy Goals

Tax policy is often concerned with maximizing horizontal equity (treating similarly situated taxpayers the same) or with encouraging certain economic activity (for example, investing in scientific research and experimental development, or renewable energy). The fundamental tax policy goal associated with the *Electricity Act* is pragmatic: to pay down the stranded debt of the old Ontario Hydro.

More specific tax policy goals are evident from the legislation itself. The PILs and transfer tax regimes are intended to be integrated to minimize double taxation. For example, the so-called PILs credit permits an MEU to reduce its transfer tax liability by the amount of PILs previously remitted to the Ontario Electricity Financial Corporation. However, if an MEU loses its tax-exempt status and pays both federal and provincial corporate tax, only the smaller provincial tax portion is available to reduce a transfer tax liability. This creates an incentive for an MEU to maintain its tax-exempt status so that it can remain within the PILs regime. The departure tax is another significant incentive for an MEU to maintain tax-exempt status. It is intended to compensate the Ontario government for the removal of the MEU's assets from the PILs base from which revenues are generated to pay down the stranded debt.

A subsidiary goal of the transfer tax legislation is to avoid creating disincentives for an MEU to transfer electricity property in appropriate circumstances, such as where the transfer would not impair the MEU's assets that form part of the PILs base. For example, a special rule in the transfer tax regulations (Ontario Regulation 124/99) allows an MEU to reduce its transfer tax liability if it reinvests in other electricity property.

With the focus on repaying the stranded debt, it is not surprising that a number of provisions in the *Electricity Act* actively promote consolidation within the public sector. A series of temporary amendments to the transfer tax regulations have allowed tax-free mergers of MEUs, both with MEUs owned by other municipal shareholders and with any of Hydro One, Ontario Power Generation, or their subsidiaries, provided they are tax exempt at the time of the merger. That amendment is now permanent.[30] Consequently, it should be possible to structure a merger with Hydro One or another MEU without paying transfer tax or the possibly more onerous departure tax. None of these advantages is available with respect to a private sector investment; tax policy compels private sector buyers to pay a much higher purchase price to achieve the same result as for municipal sellers.

Private Sector Investment

Given the foregoing limitations, how has the private sector invested in MEUs? The more

29 Ibid., subsections 2(7) and (8). A vaguely worded relieving provision in subsection 2(9) may exempt the payment from transfer tax, but only if the Minister of Finance is satisfied that a reduction of capital, or redemption or cancellation of a share is not part of a series of transactions that results in a change of ownership of the corporation.

30 Ontario Regulation 124/99, subsection 3(21). Although the Panel Report notes (page 6) that many utilities were sold by their municipal owners under a temporary lifting of the transfer tax, it does not mention that the exemption was made permanent.

significant investments have taken the form of public and private placement debt offerings. Several MEUs have sold a 10 percent interest in the holding company to private sector investors, while one MEU has entered into a long-term lease arrangement with a private sector investor, and recently sold the leased assets to that investor.

Debt Issue

The issue of new shares or debt by an MEU is generally not subject to transfer tax.[31] This is presumably because the underlying value of electricity property owned by the MEU determines the quantum of transfer tax. As such, an issue of new shares or debt will not affect the actual amount of transfer tax payable over time.

The 10 Percent Investment

A number of municipalities have sold a 10 percent interest in an MEU to a third party. Rather than purchase the MEU shares directly from the municipal shareholder, the private sector investor acquired newly issued shares of the MEU (so that no transfer tax was payable). Usually, the municipal shareholder acquires a put right, giving it the right to sell the remaining 90 percent interest in the MEU to the third party after a 10-year period, which is intended to give the municipal shareholder time to accumulate sufficient PILs credits to reduce the amount of transfer tax payable when it sells the remaining 90 percent interest.[32]

Leasing Structure

It is possible to structure a long-term operating lease over the distribution system to fit within the lease exemption in the transfer tax regulations.[33] The exemption applies to all types of property that make up the distribution system, but structuring the lease is often complicated by issues related to employees, the funding and repurchase obligations related to system improvements, and compliance with the transfer tax regulations.[34]

Pension Fund Investment

The Panel Report mentions on several occasions the possibility of pension fund investment in the LDC component of the MEU sector. However, while a pension fund is a tax-exempt entity, its potential investment would face the same transfer tax and departure tax restrictions the private sector faces. As a result, pension plans generally have been deterred from making any significant investments in MEUs in Ontario, and the few that have done so have limited their equity investments to a 10 percent

31 Although the *Electricity Act* does not clearly support the conclusion that the issue of new shares or debt by an MEU is not a transfer of property to which the transfer tax applies, this was the view taken by the Ministry of Revenue in a tax ruling issued some time ago. A number of debt offerings have since been completed on this basis.

32 The period of ten years is an estimate of the time it might take an MEU to create the offsetting PILs credit. The PILs credit, as described in the *Electricity Act*, subsection 94(4), is the amount of PILs payable and paid by an MEU over time, together with provincial taxes payable and paid by an MEU that is related (within the meaning of section 251 of the *Income Tax Act*) to the municipal shareholder immediately before the transfer. A more restrictive PILs credit rule applies when property is transferred at the MEU level. In that case, subsection 94(3) of the *Electricity Act* allows the transferor to use only the PILs and other corporate taxes payable by the transferor (and not by other members of its corporate group) to offset its transfer tax liability.

33 Ontario Regulation 124/99, subsection 3(14).

34 An example is the lease and subsequent sale of the distribution assets of Port Colborne Hydro Inc. to Canadian Niagara Power Inc., described in Ontario Energy Board Order EB-2011-0367, March 19, 2012.

interest to avoid triggering departure tax for the MEU (as a result of the MEU's loss of tax-exempt status). Transfer tax generally will not apply on a pension plan's equity investment in an MEU if it is structured as a purchase of newly issued shares of the MEU and if a municipal corporation retains a direct or indirect interest in the MEU (that is, if the pension plan acquires less than 100 percent of the MEU). However, any investments the pension plan makes in the MEU will increase the MEU's asset base, so if the MEU subsequently sold those underlying assets it would have to pay transfer tax on a larger tax base unless an exemption is available. The pension fund, of course, would bear its portion of such cost. If, alternatively, a pension plan were to acquire a 100 percent interest in an MEU, the MEU would be deemed to have transferred all its electricity property at that time, thereby triggering transfer tax on the acquisition.

The Panel Report recommends that Ontario "enter into discussions with the federal government on a tax agreement that would facilitate the removal of the transfer tax on the sale of LDC assets" (page 38).[35] Although the recommendation is directed primarily at removing barriers to the consolidation of Ontario's distribution sector, it is also expected to encourage Ontario-based pension plans to invest in MEUs, as means of providing needed financing to MEUs and a stable and secure source of income for pension plan investors. We emphasize, however, that any strategy to remove current tax-related impediments to pension fund investment in MEUs must address not only the transfer tax but also the departure tax consequences we describe above. Other potential legislative impediments must also be considered. For example, under current pension benefits standards legislation, a pension plan cannot invest more than 10 percent of its capital in any single investment, and it cannot own more than 30 percent of the voting shares of a single corporation (see Jog and Mintz 2012). It might be possible to develop alternative investment structures, such as combining debt instruments and other contractual rights, to avoid or reduce the tax consequences, but the use of such alternatives would increase the complexity and cost of investing in MEUs and likely raise other legal issues and restrictions.[36]

Other Tax Implications of the Panel Report's Recommendations

It is not clear from the Panel Report whether the panel had carefully thought through all of the possible tax issues associated with its recommendations – perhaps these issues will be managed in the legislative process. We have already mentioned that the elimination of the transfer tax is not a federal government mandate. However, the Panel Report's recommendations relating to both the expropriation of assets on a non-voluntary consolidation and the settlement of intercompany debt raise some potentially significant tax issues for MEUs.

Specifically, the Panel Report recommends that owners of LDCs who participate in voluntary consolidations receive shares in the new regional

35 Although the Panel Report suggests that the province needs federal support to eliminate the transfer tax, that is not technically accurate, as the tax is imposed by provincial statute. The federal government, however, does have the power to expand the concept of a tax-exempt municipal corporation to allow for a greater than 10 percent minority shareholding by private (non-municipal) shareholders.

36 For example, in making investments, pension funds must comply with their constitutional and governing documents and stated investment policy (both of which can be amended). Pension funds can invest in derivatives, but they are subject to prudence requirements concerning the particular risks associated with the type of derivative and the counterparty involved. Pension funds are also subject to self-dealing restrictions that prohibit them from investing in a "related party," which is defined very broadly.

distributors based on the valuation of their assets used to create the distributors, while LDCs that do not voluntarily agree to a merger and are amalgamated through mandatory mechanisms should have their assets assigned to the new regional distributors assessed at book value (Panel Report, page 36). The Panel Report does not address the differing tax consequences in those two scenarios. In a voluntary merger, rollovers would be available to avoid departure tax and transfer tax consequences. In contrast, a non-voluntary merger would trigger the tax consequences described above. The report also recommends that municipalities retire outstanding notes with LDCs that are above market value, or renegotiate them so that they reflect current interest rates (Panel Report, page 38). However, LDCs would be subject to tax consequences if they are considered to have repaid, settled, or extinguished an outstanding debt for less than the amount for which the debt was originally issued.

Alternative Policies and Legislative Changes

The Panel Report states that the "investment needed to transform the province's current electricity distribution system into one that uses modern technology to provide new customer services will cost billions of dollars" (page 17), but MEUs are restricted in their ability to attract new financing, and their municipal owners face legal barriers in making additional MEU investments (page 24). These restrictions bolster the need for private investment. To attract increased private sector investment in MEUs, therefore, existing barriers should be changed and/or eliminated.

The current tax regime is a significant barrier to attracting private investment in MEUs. The most direct way to facilitate private sector investment is to eliminate both the departure tax and the transfer tax. Given the tax policy objective of paying down Ontario's stranded debt, however, this would not be a winning strategy. The departure tax is a proxy for future lost PILs revenues, and once an MEU loses its tax-exempt status, only one dollar out of every three dollars paid under the combined federal-provincial corporate tax system would be allocated to the province. Moreover, the MEU's migration to the federal corporate tax system would adjust the tax cost of its existing assets to reflect their fair market value at the time of the migration. Any resultant increase in the tax cost of those assets would further reduce future tax revenues on capital gains and recaptured depreciation.

How, then, could Ontario preserve its tax base while permitting the MEU sector to attract capital on the most cost-effective basis? The solution would have to involve the federal government. There is precedent for such a joint arrangement, as the federal government has entered into agreements with provincial governments to support specific policy goals and initiatives.[37] We suggest two options.[38]

Option 1: Amend the Ownership Test

One possibility is to amend the ownership test under the federal tax rules applicable to municipal corporations to expand private sector participation while maintaining the MEU's tax-exempt status. The compromise might be to allow private sector ownership to expand to, for example, 49 percent, while limiting the type of activities that such an

37 A recent example is Ontario's agreement to harmonize its provincial sales tax with the federal Goods and Services Tax to create a single value-added tax administered by the federal government. In addition to reducing Ontario's administration costs, sales tax harmonization is expected to increase the profits of Ontario businesses by reducing the costs associated with having to charge and administer two separate taxes, which ultimately should increase income tax revenues paid to the federal government.

38 This analysis was conducted and finalized before the federal budget was released on March 21, 2013.

MEU can undertake. Perhaps the MEU's activities could be restricted to those specifically identified in subsection 149(1.2) of the *Income Tax Act*, which provides relief from the source-of-income test for income from certain activities that are "regulated by a province" and for income sourced by reference to a contract with a government entity.

In other words, the ownership threshold would climb to 49 percent, but only if the municipal corporation restricts its activities to those already regulated by some level of government. We believe these changes would be consistent with the Ontario government's past statements on its policy related to municipal corporations – namely, that such corporations should limit their activities to the geographical boundaries of their municipalities and not compete with the private sector; and that effective control of tax-exempt municipal corporations remain in government hands. On this second point, as a matter of law, we argue that a municipal shareholder would retain "effective control" of an MEU provided that it retained more than 50 percent of the MEU's voting shares.

Option 2: A Federal Public Utilities Income Tax Transfer Act

A second, simpler option was hinted at in the Drummond Report (Commission on the Reform of Ontario's Public Services 2012) and draws on the former *Public Utilities Income Tax Transfer Act* (PUITTA). This approach would not attempt to preserve tax-exempt status for the MEU. Rather, a privately held MEU would pay both federal and provincial corporate taxes, and the federal government would remit to the province a substantial portion of the tax collected.

Under the PUITTA model, the remittance obligation was discretionary, but arose whenever a "designated corporation" carried on prescribed activities that effectively generated 50 percent or more of its revenues in a taxation year. The prescribed activities were the distribution and sale to the public in the province, or the generation and sale in the province for distribution to the public, of electrical energy or steam, or the distribution and sale of gas to the public in the province. A designated corporation would have generated a payment to the province equal to 95 percent of the corporate taxes it paid on its gross revenues under Part I of the *Income Tax Act*.

This option would have no real cost for the federal government, since most MEUs in Ontario currently maintain tax-exempt status and therefore pay no federal corporate income tax.

RECOMMENDATIONS AND CONCLUSIONS

From the Drummond Report to the Ontario Distribution Sector Review Panel, the public discussion on reform of local distribution companies has focused on the apparent need to consolidate Ontario's LDCs. However, amalgamation in itself might do nothing to improve efficiency – through lower costs, higher profitability, or both – of municipally owned electricity utilities. The example of forced amalgamations of municipalities in Ontario shows how badly amalgamations can go when decided by provincial fiat. Rather than focus policy reforms on the need for mergers or on the appropriate scale of LDCs, the most important question to ask is whether such entities should be publicly or privately owned.

The evidence of electricity sector mergers shows that whether a more concentrated distribution structure might lead to lower cost or better service would depend on the specific mergers and amalgamations that emerged. Accordingly, the province should be agnostic as to the size of LDCs, and enable individual municipalities to seek amalgamations with other public utilities or private investment – ranging from partial investments to outright sales – that make the most economic sense in those individual cases.

The system of departure and transfer taxes has constrained private sector investment in the electricity distribution sector. The Ontario

government's preference for public sector mergers is inconsistent with the traditional policy goal of tax neutrality, which has been the cornerstone of tax policy reforms in the broader economy provincially and federally. We argue, therefore, that any tax reform should recognize the twin goals of tax neutrality and the collection of revenue to pay off Ontario's electricity sector residual debt. The two most promising options to achieve this are for the federal government to: (i) amend the ownership test under the *Income Tax Act* applicable to municipal corporations to allow LDCs to remain tax exempt with as much as 49 percent private ownership; or (ii) introduce a transfer tax system similar to the former *Public Utilities Income Tax Transfer Act*, whereby the federal government remits to the province corporate taxes it collects from privatized utilities.

Only when tax policy has enabled neutrality between private and public investment should municipalities move forward on their own, without provincial edicts, to consider amalgamation among themselves or as part of larger, privately owned electricity distribution networks. Private investment in LDCs enabled by tax neutrality would also provide them the capital they need to pursue other provincial electricity policy goals, such as investment in smart-grid technologies.

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